



U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy



The Department of Energy's Weatherization Assistance Program

A National Perspective

Home Energy Plus Technical Exchange Fair
2016

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WAP: The Big Picture

Weatherization Assistance Program



The U.S. Department of Energy's (DOE) Weatherization Assistance Program (WAP) is the nation's largest whole-house energy efficiency program with a unique mission.

It reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety.

- **40,000** homes weatherized on average annually with Congressional appropriated funds
- Average annual energy cost reduction of **\$264 or more** per household.
- Over **7 million** households have received Weatherization services.
- Support over **8,500** direct and indirect jobs.

Enabling Legislation and Regulation

*“...to increase the **energy efficiency** of dwellings owned or operated by low-income persons, reduce their total residential energy expenditures, and improve their **health and safety**, especially low-income persons who are particularly vulnerable such as the elderly, the handicapped, and children.”*

**Energy Conservation in Existing Buildings Act of 1976
(Title IV of the Energy Conservation and Production Act),
Public Law 94-385, August 14, 1976.**

- The WAP was created as a categorical Formula Grant which is governed by the regulations outlined in **10 CFR 440**.
- The Department of Energy administers the program and creates policies to interpret the regulations and assist the Grantees in administering the funds in accordance with the Congressional intent.

Distribution of Funds: The WAP Network



US Department of Energy
Energy Efficiency and Renewable Energy
Office of Weatherization and Intergovernmental Programs
Weatherization Assistance Program

Grantees:

50 State Offices,
The District of Columbia,
Native American Tribal Organizations,
U.S. Territories

Subgrantees - Approximately 900 Local Agencies:

Community Action Programs
Local Governments
Agency-Based Crews or Private Sub-Contractors

Low-Income Clients

Workforce

- DOE's WAP and its additional investments support **8,500** direct and indirect jobs.
 - Generated **\$476** million in incomes
 - Increased national economic output by **\$1.2 billion**, using a national economic multiplier of **2.93**.
- On average, approximately 40 percent of WAP work is performed by in-house crews and 60 percent is provided by independent contractors such as HVAC and insulation companies.



Housing Types Served by WAP



Single Family
59%

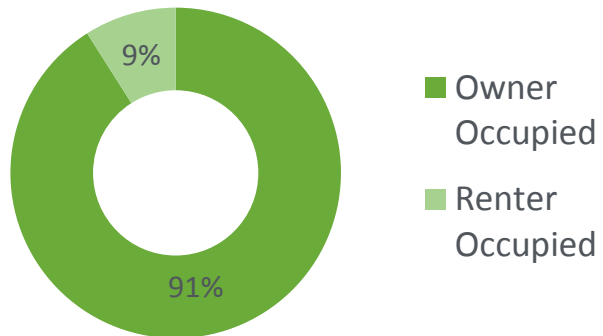


Multifamily
23%

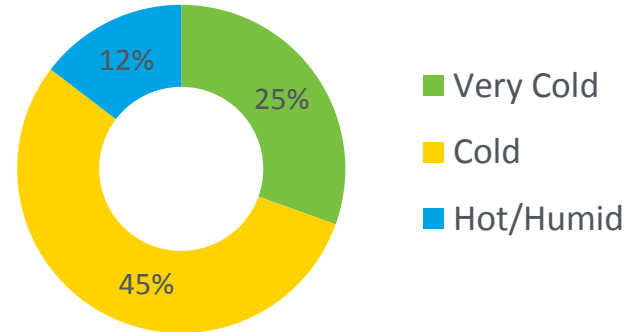


Manufactured/Mobile
18%

Ownership



Climate Zone

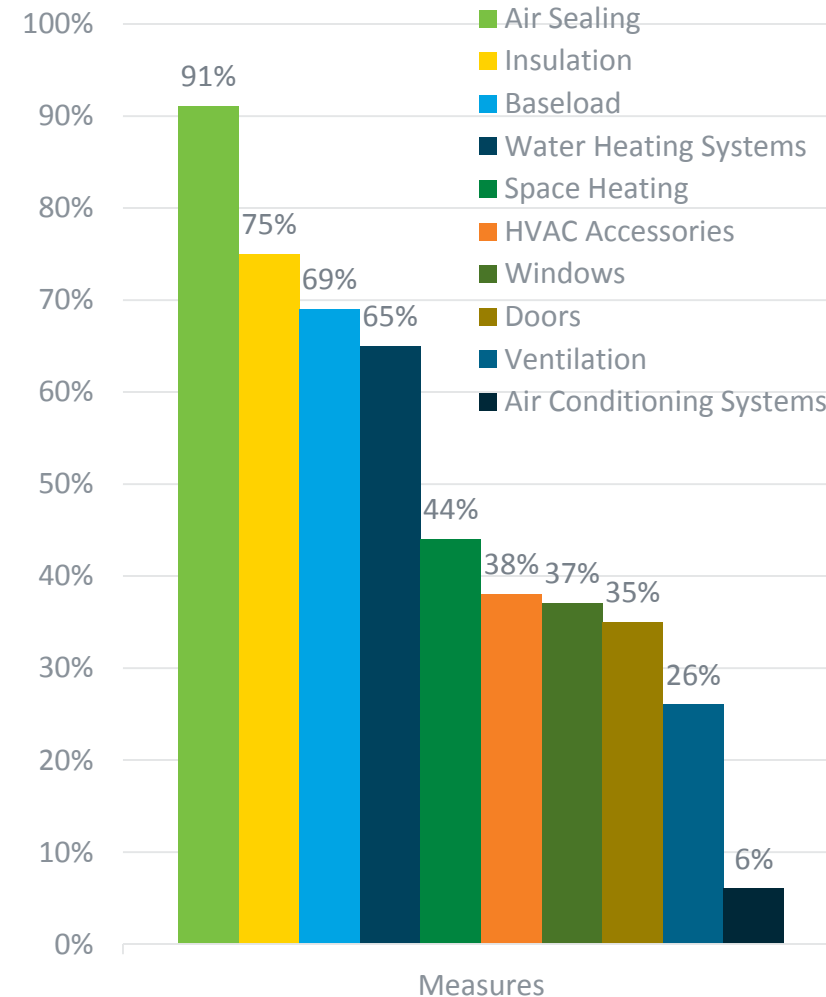


Measures

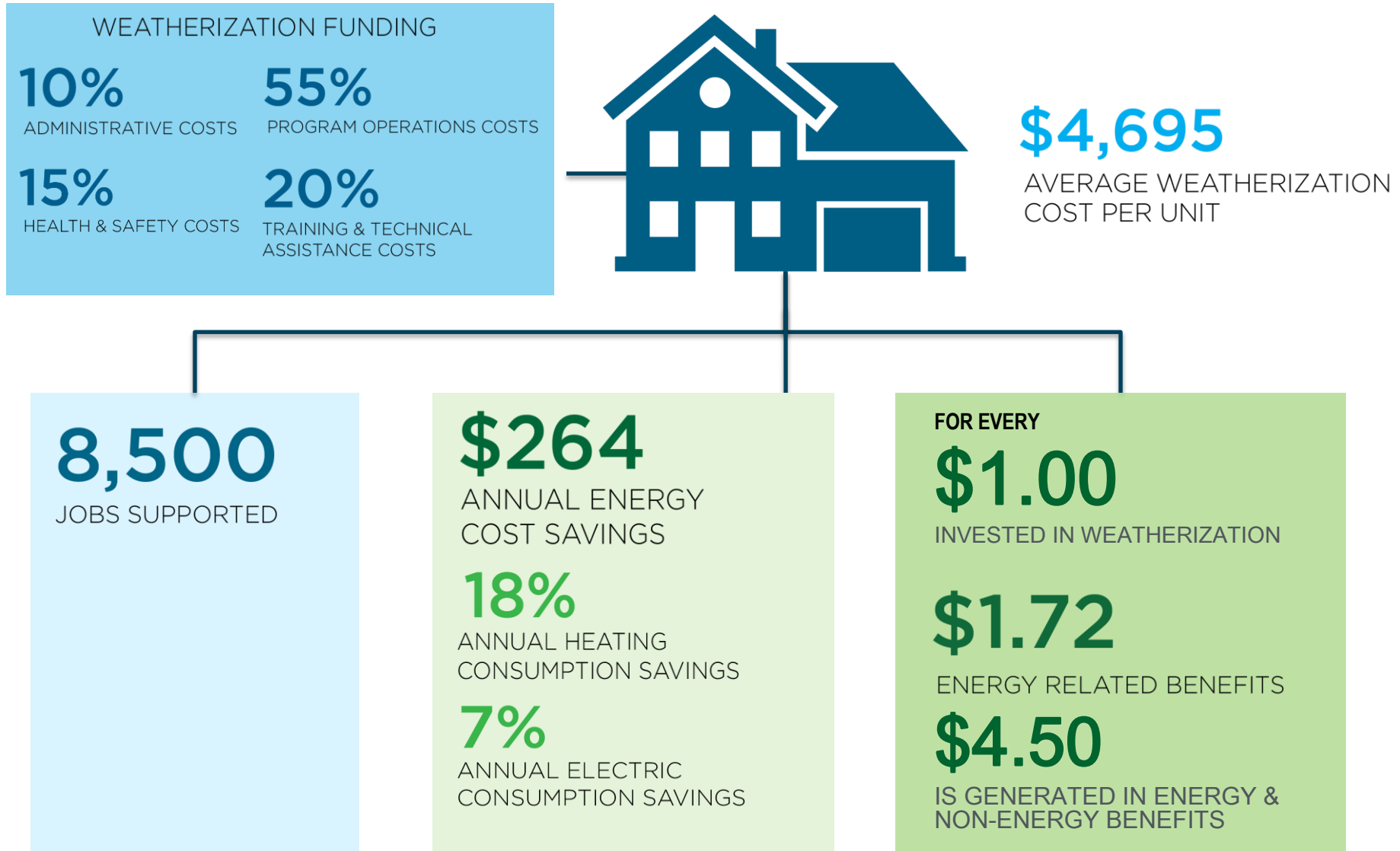
Frequency of Measure Installation, PY 2008

(97,965 Units)

- The chart illustrates the frequency for which measures are installed.
 - In 2008 study, 91% of all homes had air sealing.
 - In contrast, only 6% of the homes included installation of an air conditioning system.



Program Performance



Program Performance by Housing Type-2008

- Weatherization is complex - involving over 100 different categories of work and over 800 different actions.
- Installed measures delivered substantial energy reductions and energy cost savings to clients.
- Installed measures delivered substantial energy reductions and energy cost savings to clients in both building types.



Single Family

\$3,096 spent per unit

\$5,337 saved per unit

\$307 million savings



Mobile Homes

\$2,961 spent per unit

\$3,053 saved per unit

\$54 million savings



Small Multifamily

\$2,878 spent per unit

\$4,618 saved per unit

\$24 million savings



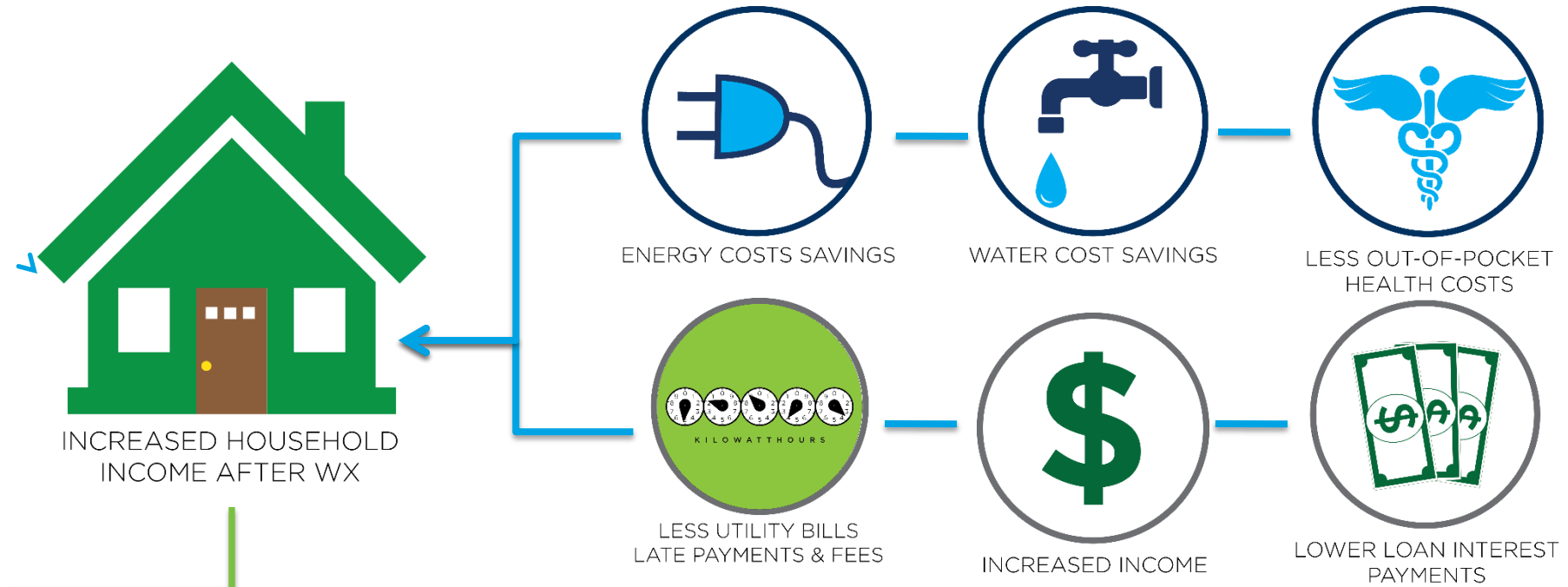
Large Multifamily

\$3,336 spent per unit

\$6,460 saved per unit

\$35 million savings

Non-Energy Benefits – Impacts on Households

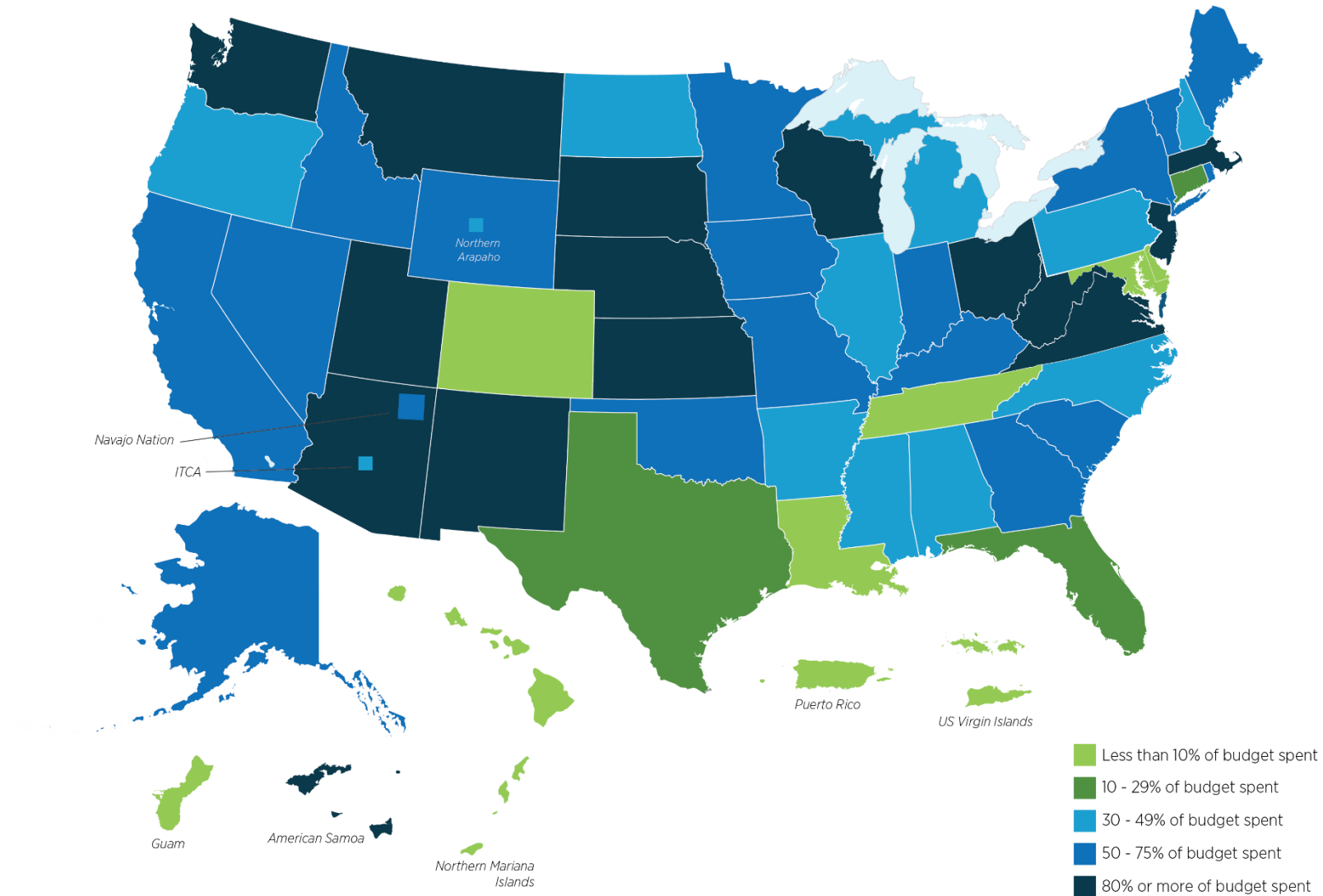


For every \$1.00 invested, \$2.28 in non-energy benefits is realized. This represents tremendous benefits for families after Weatherization is performed.

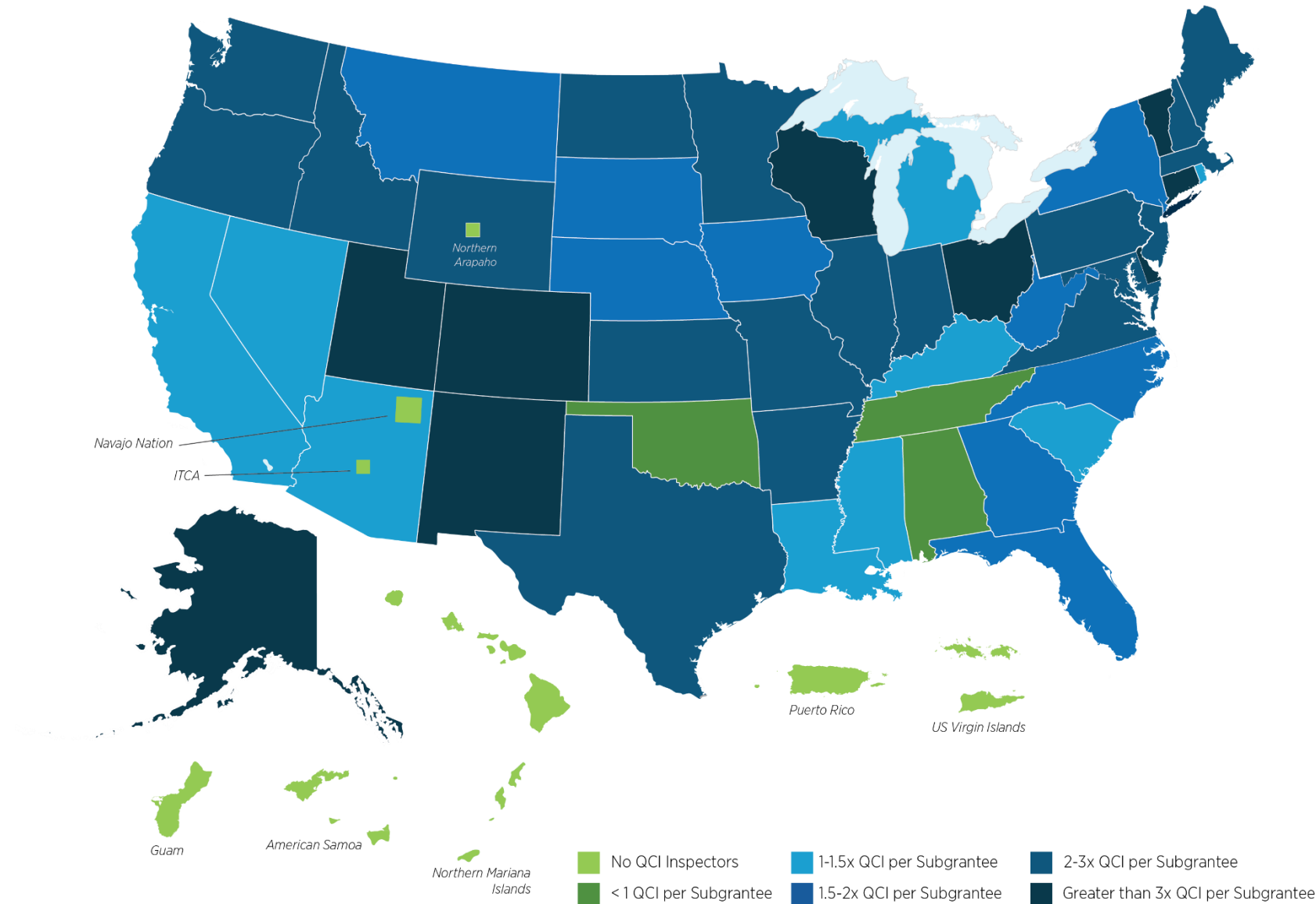
- Homes are more livable
- Households estimated saving an average of **\$514** in out of pocket medical expenses in the year following Weatherization
- Participants saved **\$583** in additional pay per year due to fewer missed days of work (i.e. sick days, doctors visits)
- The total health and household-related benefits for each unit is **\$14,148**

The DOE Perspective

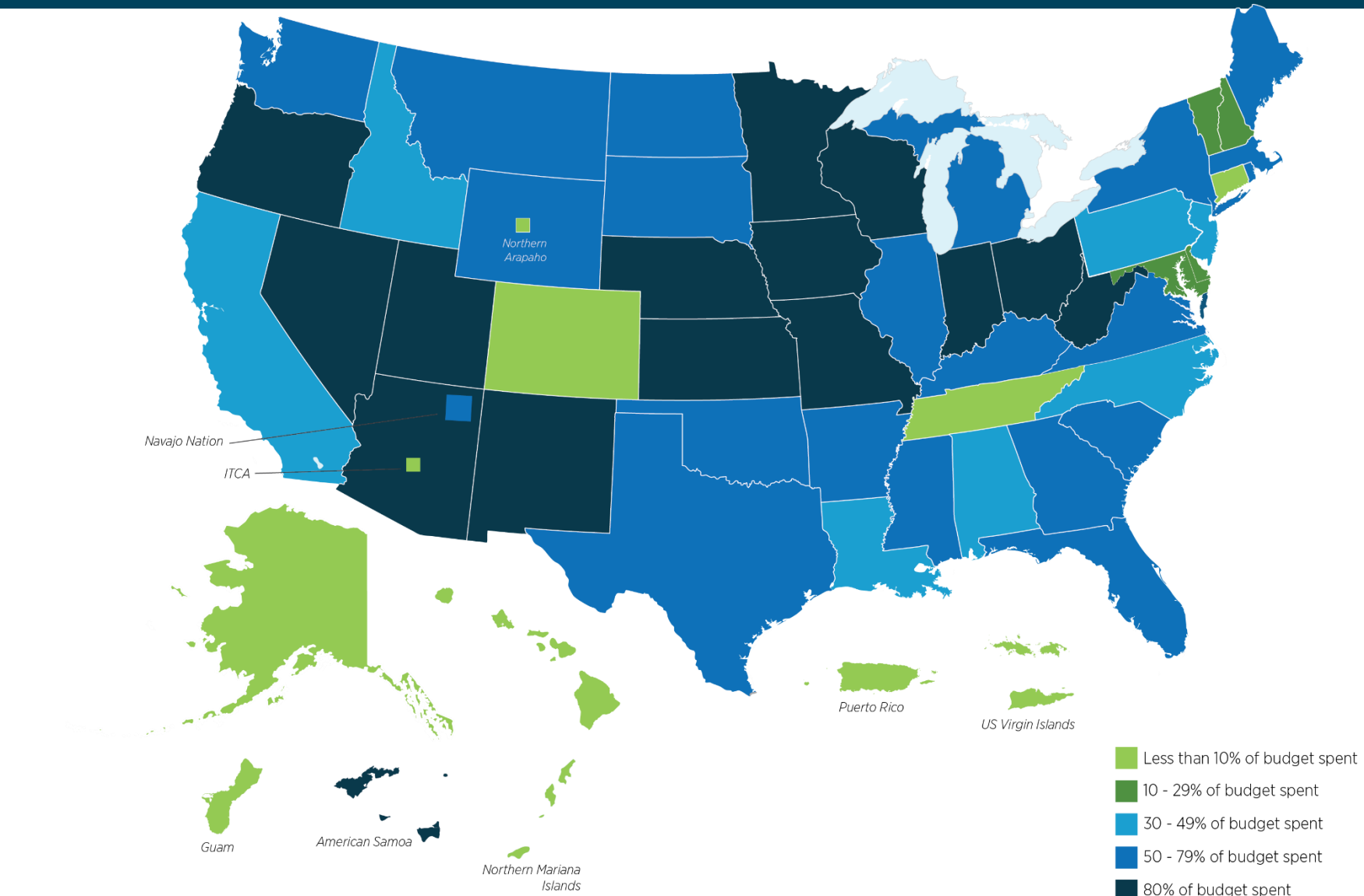
2014 T&TA Map



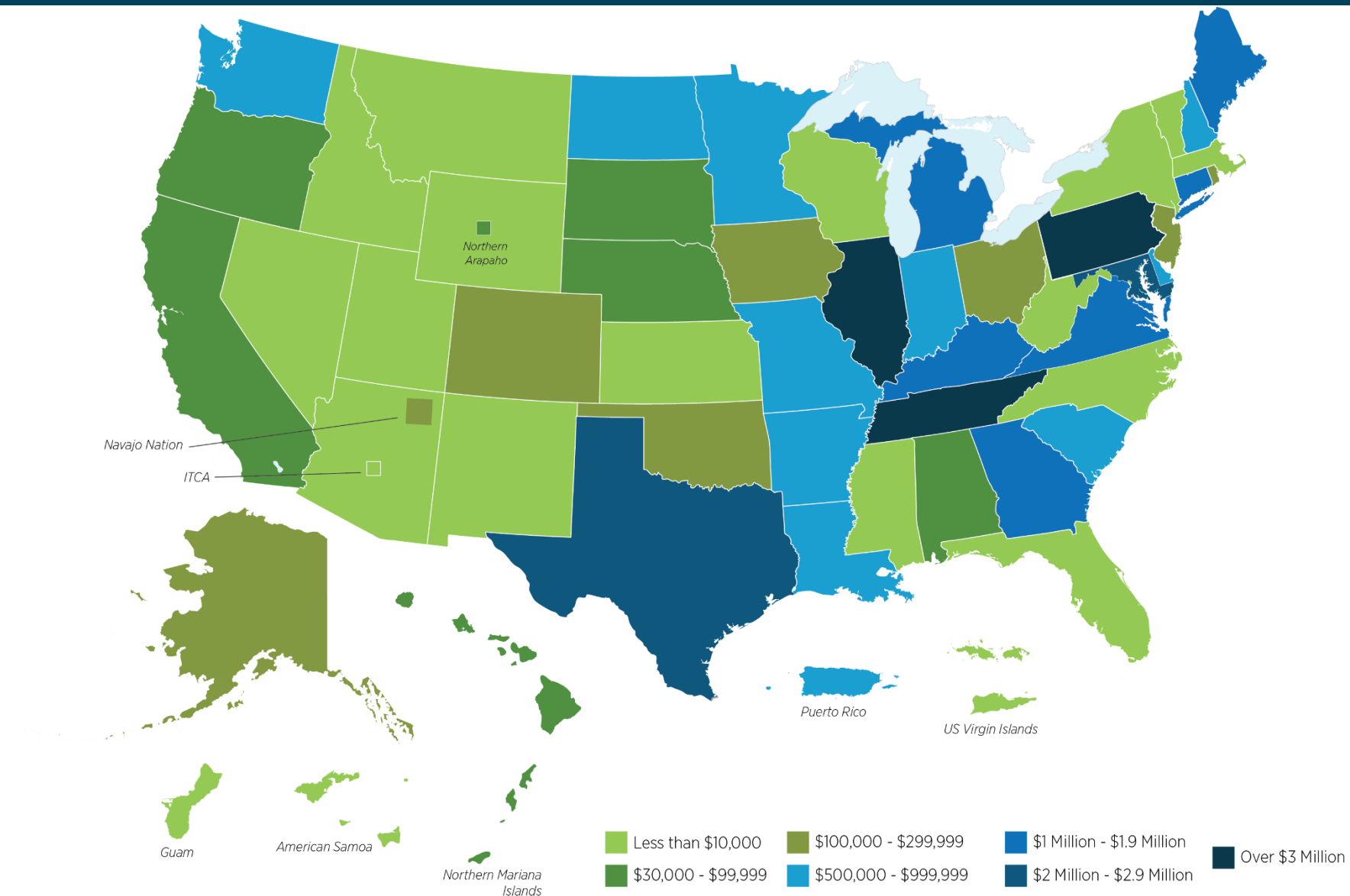
QCI – Ratio of Credentials to # of Subgrantees



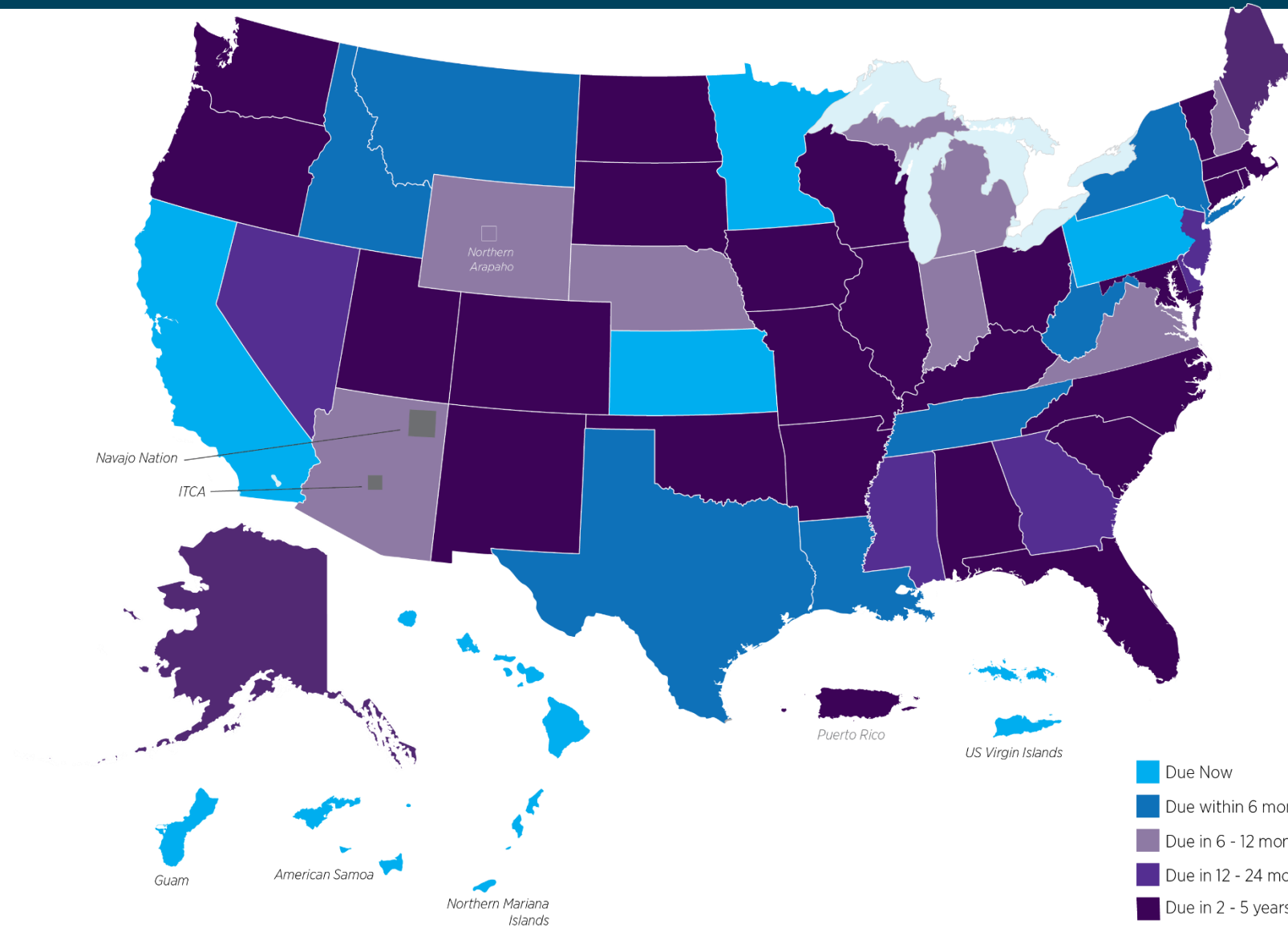
2014 H/S – Approvals and Expenditures



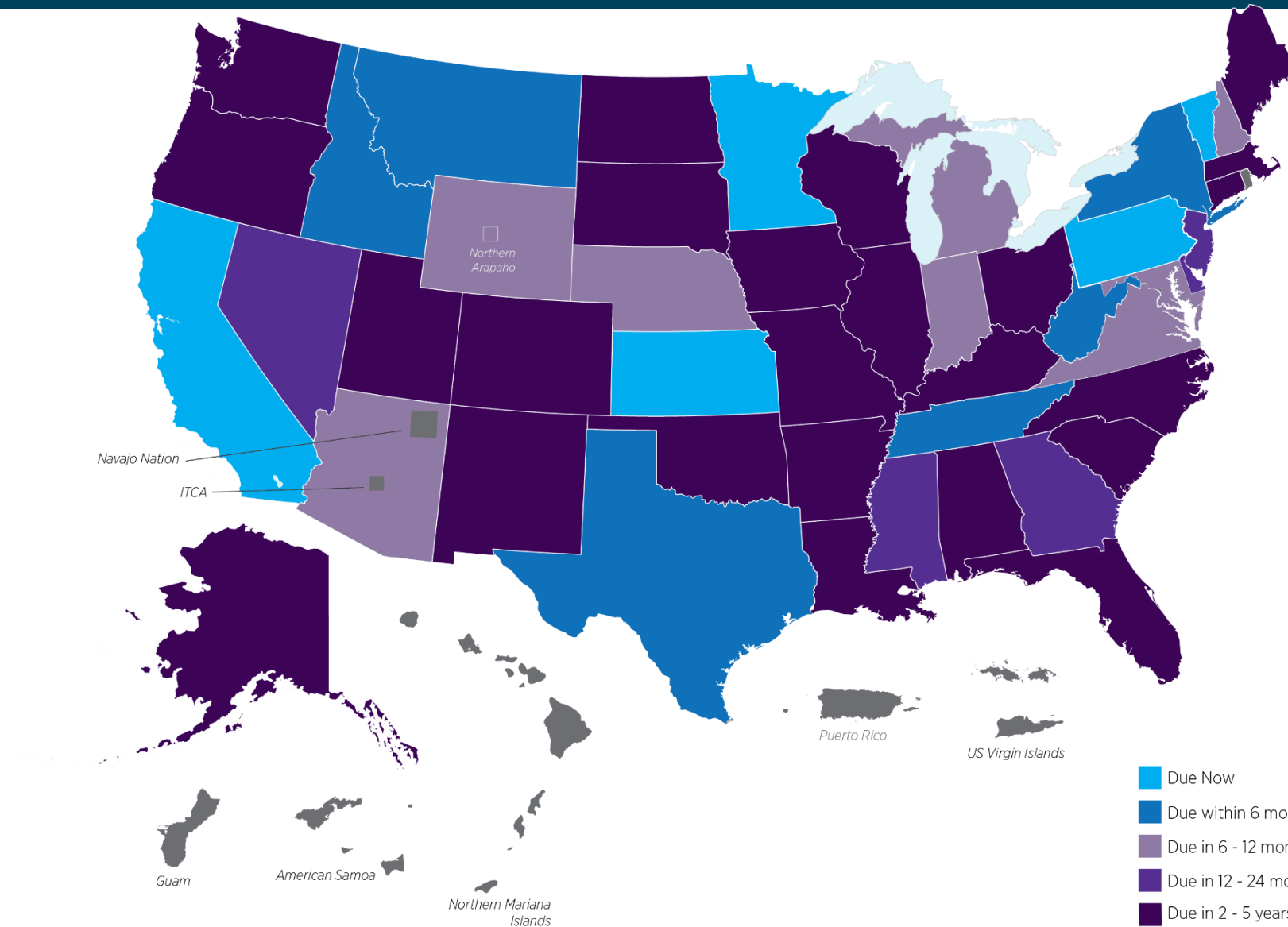
Carryover Map – PY14



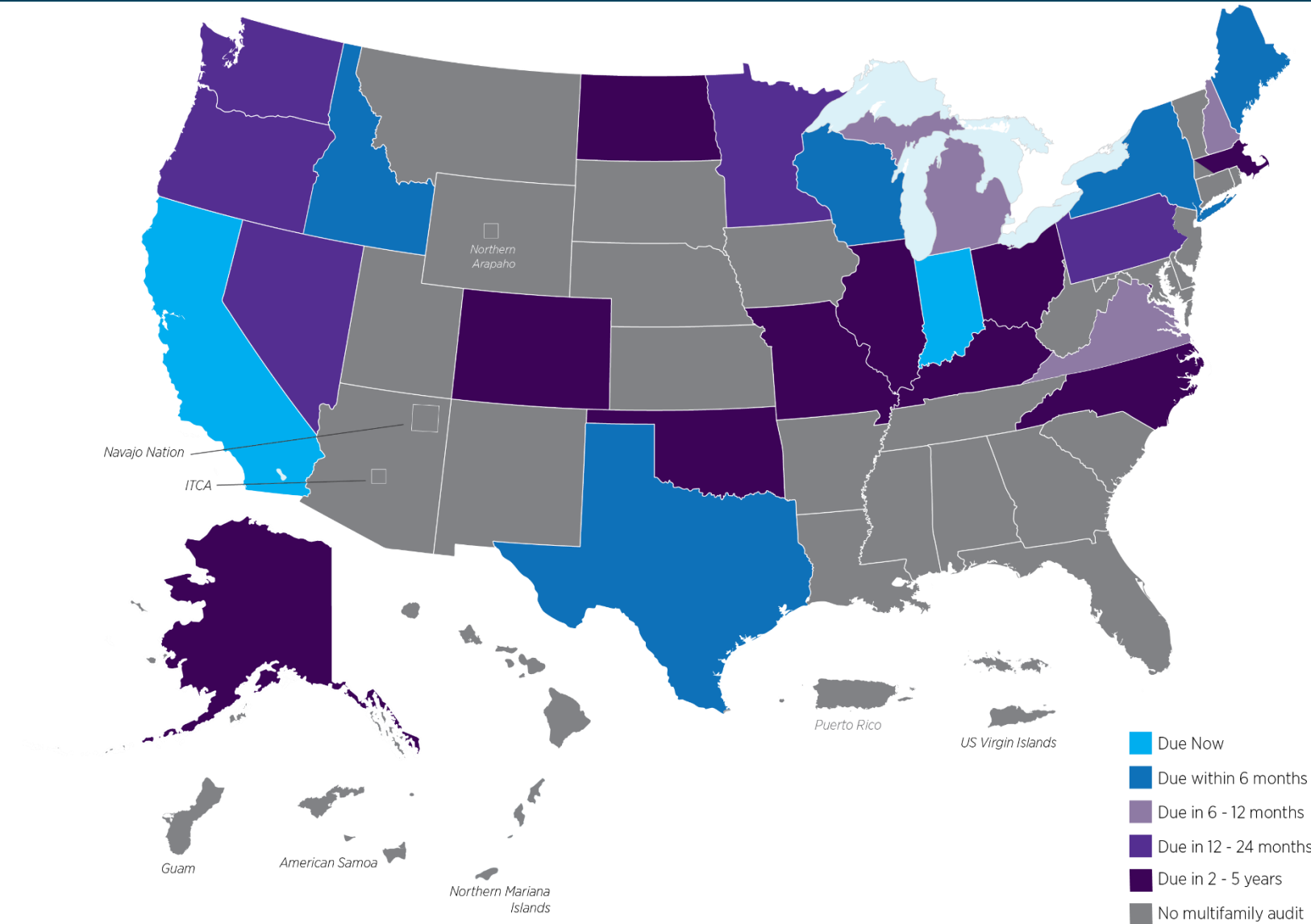
Audit Tools – Single Family



Audit Tool – Mobile Homes



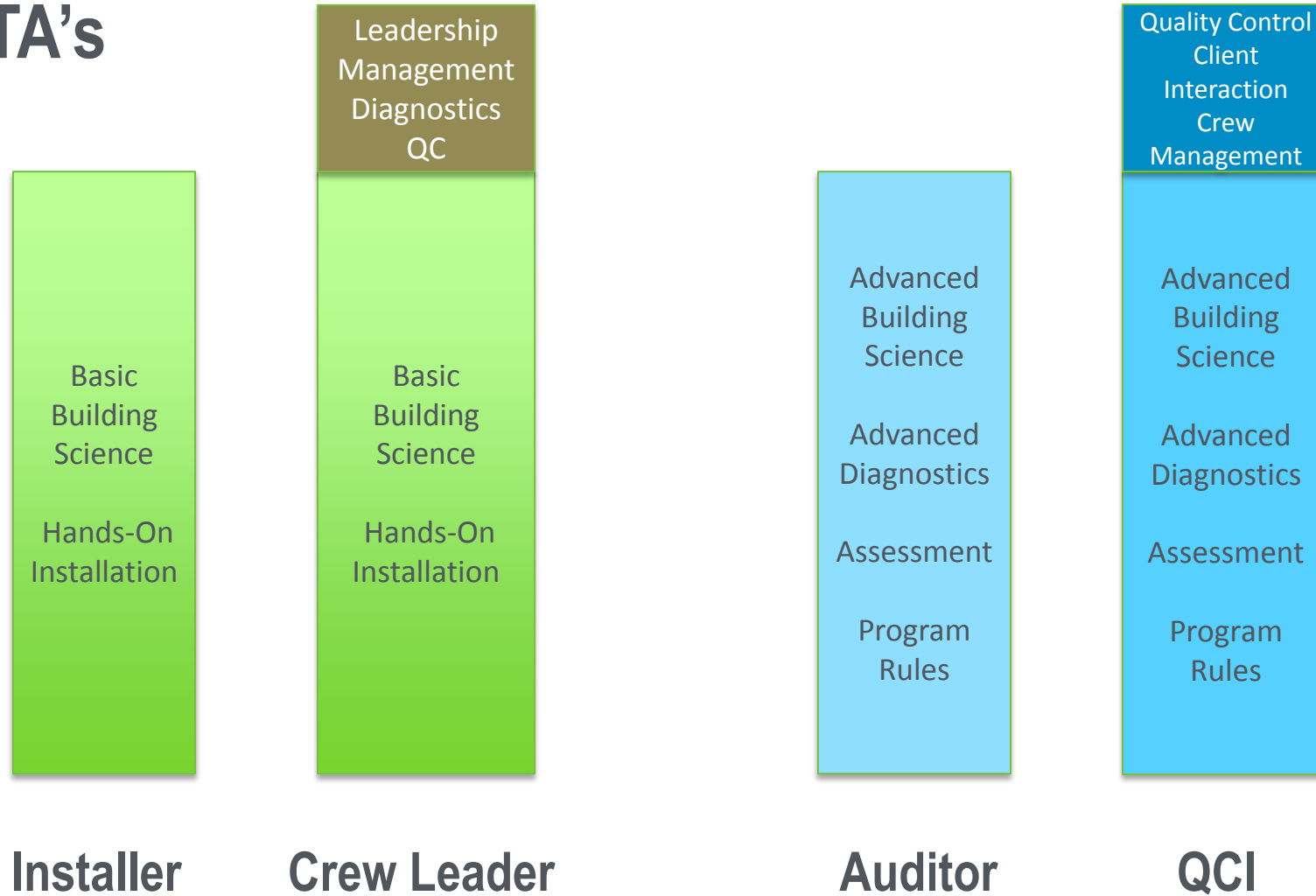
Audit Tool – Multifamily



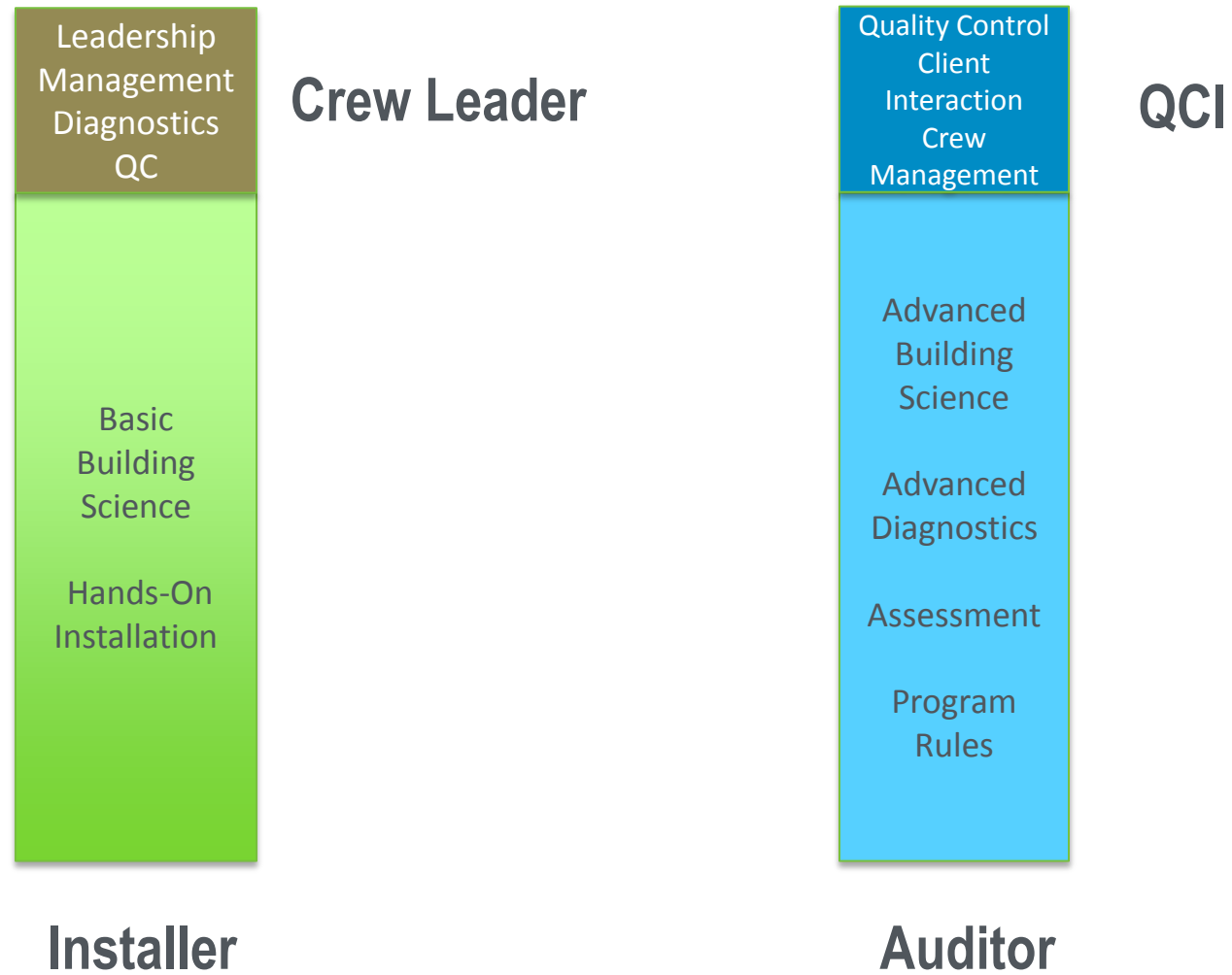
On the Horizon

Streamlining the Resources- Existing Structure

JTA's



Streamlining the Resources- Proposed Structure



Innovation in Weatherization

- WAP has been receiving indications from multiple stakeholders that expectations are going up regarding the program's ability to coordinate with other national efforts
 - Renewable Energy
 - Community-based programs
 - Multifamily
 - Healthy Homes
- Two outcomes of this interest
 - WAP regulators impose a direction on the program through legislation or other means
 - WAP looks to its existing regulations to demonstrate flexibility and forward momentum on innovative program delivery models

Low Income Accelerator

- DOE-wide Initiative
- Technical Assistance to Grantees to assist with non-traditional program delivery models
- Will fit within existing regulations
- Voluntary

Solar Initiatives

- Low-Income Solar is a hot topic
- Interest from a variety of programs and stakeholder
- DOE is working with others to ensure that the WAP is well positioned to respond to this interest

Industry Impact



Over the course of its history, the WAP has been a key player in deploying technology and facilitating greater industry adoption.

As the only Federally supported residential efficiency deployment program, the WAP has used the knowledge and technological advancements that it has fostered over its 40 year history to move the entire Home Performance Industry forward.

Today, the WAP has raised the bar for work quality and program performance by creating and adopting industry leading standards for work quality, worker certification and training.

The WAP network currently employs almost **1,600** certified Quality Control Inspectors who have distinguished themselves as the top professionals in the field.

The WAP also supports a diverse network of nationally accredited Energy Efficiency training programs that offer comprehensive professional weatherization training to the entire industry.

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